Approved by OMB¹ Control No.: 3150-0183

Expires: 02/28/2023

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM QUESTIONNAIRE

Massachusetts Agreement State Program
Reporting Period: June 16, 2018 – November 18, 2022

AS OF OCTOBER 19, 2022

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

A. GENERAL

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

None. No Recommendations from previous IMPEP review.

B. COMMON PERFORMANCE INDICATORS

- I. Technical Staffing and Training
 - 2. Please provide the following organization charts, including names and positions:
 - (a) See Organization Chart document
 - (b) A chart showing positions of the radiation control program, including management – See Organization Chart document
 - (c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

Sealed source and device evaluations are performed by Bob Locke, Szymon Mudrewicz, Kenath Traegde, and Joshua Daehler, their positions shown in the chart of the Radiation Control Program. Low-level radioactive waste fee and survey collection activities are performed by Yamil Tejeda, her position shown in the chart of the Radiation Control Program. Uranium recovery is not applicable.

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing &

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compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table heading should be:

Name Position Area of Effort FTE%

Name	<u>Position</u>	Area of Effort	FTE%
John (Jack) M. Priest, Jr.	Director	Administration	45
		Emergency response	5
Joshua Daehler	Radioactive Materials	Administration	25
	Unit Supervisor	Materials licensing &	
		compliance	40
		Emergency response	5
		Other (SS&D)	15
		Other (Regulations)	15
Kenath Traegde	Licensing Supervisor	Materials licensing &	
		compliance	70
		Emergency response	5
		Other (SS&D)	25
Anthony (Tony)	Inspection Supervisor	Materials licensing &	
Carpenito	(Promotion effective	compliance	95
	June 16, 2014)	Emergency response	5
Zara Rejaee	Radiation Control	Materials licensing &	
	Officer	compliance	95
		Emergency response	5
Charma Waring	Radiation Control	Materials licensing &	
-	Officer	compliance	95
		Emergency response	5
Bruce Packard	Radiation Control	Materials licensing &	
	Officer	compliance	95
		Emergency response	5
Ellie Choi	Radiation Control	Materials licensing &	
	Officer	compliance	95
		Emergency response	5
Robert (Bob) Locke	Radiation Control	Materials licensing &	
	Officer	compliance	60
		Emergency response	5
		Other (SS&D)	35
Szymon Mudrewicz	Radiation Control	Materials licensing &	
	Officer	compliance	60
		Emergency response	5
		Other (SS&D)	35
Yamil Tejeda	Program Coordinator	Other (Billing, Low-	80
		Level Radioactive	
		Waste and Clerical)	
Kaitlin Haverty	Accountant	Other (Billing)	50
Judy Garbati	Clerk	Other (Clerical)	100
Jefte Amerena	Office Support	Other (Clerical)	50
	Specialist		

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

<u>Name</u>	Date of Hire	Degree(s)	Additional Training	Years of Experience in Health Physics
Charma Waring	February 25, 2019	B.S. in Safety Studies	Extensive, see below	20

<u>Charma Waring</u> was previously qualified by Rhode Island Agreements State to perform independent radioactive materials licensing and inspections. Additional training, since joining Massachusetts Radiation Program, included Transportation of Radioactive Materials Self Study Course (H-308S); Licensing Procedures (G-109); Root Cause Workshop (G-205); and on-the-job training.

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

None.

6. Identify any changes to your qualification and training procedure that occurred during the review period.

None.

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

Holly Holden left Radioactive Materials Unit in late 2018, the position filled by Charma Waring in February of 2019.

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

The two vacant positions, Environmental Engineer III and Program Manager VI, are recently added new positions.

For Agreement States, does your program have an oversight board or committee which
provides direction to the program and is composed of licensees and/or members of the
public? If so, please describe the procedures used to avoid any potential conflict of
interest.

No.

II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

All facilities are inspected at the inspection frequency specified in the NRC Inspection Manual 2800.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

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2018 beginning June 16, 2018: 22 routine Priority 1, 2, and 3; 6 initial. 2019: 46 routine Priority 1, 2, and 3; and 17 initial. 2020: 34 routine Priority 1, 2, and 3; and 6 initial. 2021: 32 routine Priority 1, 2, and 3; and 6 initial. 2022: 38 routine Priority 1, 2, and 3; and 5 initial.
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12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

No inspections of Priority 1, 2, and 3 licensees were conducted overdue using the criteria established in the latest revision of IMC 2800 issued March 2, 2020.

One initial inspection was conducted nine (9) days overdue and its information listed below.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name McDonnel, David
- (2) License Number 49-0783
- (3) Priority (IMC 2800) 03122
- (4) Last inspection date or license issuance date, if initial inspection 5/25/2021 license issue date
 - (5) Date Due 5/25/2022
 - (6) Date Performed 6/3/2022
 - (7) Amount of Time Overdue 9 days
 - (8) Date inspection findings issued 6/8/2022
- 13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees-and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

There are currently no overdue inspections for Priority 1, 2, and 3 licensees nor any overdue initial inspections.

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 2800 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

2018	13	4
2019	10	3
2020	17	4
2021	12	4
2022	17	3

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?

SOP #: RCP-2020-01, Temporary Instruction (RCP Field Inspections Related to COVID-19) that initially became effective on June 22, 2020, and became optional on May 31, 2021, was rescinded on October 3, 2022.

Relating to NRC's STC-20-082 and IMC 2800, written Guidance for Conducting Reciprocity Inspections using a risk informed basis was made.

Inspection related forms were updated to incorporates Developer content controls such as pull-down menus and check boxes.

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

<u>Inspe</u>	ector Supervisor	<u>License Cate</u>	gory <u>Date</u>
Z.R.	J.D.	03620	2/8/2018
B.P.	J.D.	02201	8/21/2018
M.I.	J.D.	02201	8/24/2018
H.H.	J.D.	02120	10/3/2018
E.S.	J.D.	03620	10/23/2018
E.C.	J.D.	02232	11/8/2018
B.L.	J.D.	02232	11/8/2018
A.C.	J.D.	03620	11/28/2018
S.M.	J.D.	02120	12/6/2018
E.C.	J.D.	03620	6/5/2019
E.S.	J.D.	02121	8/21/2019
M.I.	J.D.	02121	9/4/2019
A.C.	J.D.	03210 & 02500	9/24/2019
Z.R.	J.D.	03210 & 02500	9/24/2019
B.P.	J.D.	02230 & 02120	10/8/2019 & 10/10/2019
B.L.	J.D.	03320 & 03310 & Security	11/6/2019 & 11/7/2019
A.C.	J.D.	02500 & 03900	11/27/2019
H.H.	J.D.	02500 & 03900	11/27/2019
A.C.	J.D.	03521 & Security	12/4/2019
S.M.	J.D.	03521 & Security	12/4/2019
C.W.	J.D.	03320 & 03310 & Security	9/8/2020
B.L.	J.D.	03214	11/4/2020

E.C.	J.D.	03214	11/4/2020
Z.R.	J.D.	03620	11/10/2020
A.C.	J.D.	03120 & 03123	1/26/2021
B.P.	J.D.	03214	10/20/2021
S.M.	J.D.	03620	11/3/2021
B.L.	J.D.	02500	9/7/2022
C.W.	J.D.	03510 & Security	9/16/2022
E.C.	J.D.	02201	10/18/2022

Consistent with NRC's TI-003, Evaluating the Impacts of the COVID-19 Public Health Emergency as Part of the Integrated Materials Performance Evaluation Program (IMPEP), the supervisory accompaniments were reduced by half for calendar years 2020, 2021 and 2022.

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

			RADIATION CONTROL PI									
		OPERABLE IONIZING RAD	NATION DETECTION and/or MEASUREMENT	FOU	DUEN	TRIOC	TION - II	ndamed ac	of 12-10-2020			
		OF ENABLE IONIZING NAD	ATTOM DETECTION STIGROF MEASUREMENT	_				puateu as				
				ļ <u>'</u>	Radia	tion Detec	ted			Primary Fu	netion	
				1		Gamma/			Isotope	Air	Gamma	Contamination
	TYPE	DESCRIPTION	LOCATION	Alpha			Neutron	Exposure	Identification	Sampling	Spectrocospy	
	Fixed	Packard Canberra Tri-Carb 2750 TR/LL LSC	Jamaica Plain, MA (MERL)	X	X	X						X
	Fixed	Perken Elmer Tri-Carb 2910 TR	Jamaica Plain, MA (MERL)	X	X	X						X
	Fixed	Canberra Detector HPGE 30%	Jamaica Plain, MA (MERL)			Х			X		X	
	Fixed	Canberra HPGe 35% REGe 30%	Jamaica Plain, MA (MERL)			X			X		X	
	Portable	**Panasonic TLD reader 705A w/ 801, 814 badges	Jamaica Plain, MA (MERL)		_	X		X				
	Portable	Ludlum 15 neutron detector	Charlestown, MA (Office @ Schrafft Ctr.)				X					
	Portable	Ludlum Model 19 Micro-R Nal(TI) gamma scintillator	Charlestown, MA (Office @ Schrafft Ctr.)		_	X		X				
	Portable	Victoreen 450P Ion Chamber (0-5 R/hr)	Charlestown, MA (Office @ Schrafft Ctr.)	—	_	Х		X				
	Portable	Ludlum Model 9DP Ion Chamber (0-5 R/hr)	Charlestown, MA (Office @ Schrafft Ctr.)			X		X				
_	Portable	Ludlum 3 Ratemeter with various probes	Agency staff home and/or vehicle and office	X	X	X		X				X
	Portable	Ludlum 2241-2 Ratemeter with various probes	Agency staff home and/or vehicle and office	X	X	X		X				
-	Portable	Ludlum 14C GM Ratemeter with various probes	Agency staff home and/or vehicle and office	X	X	X		X				X
	Portable	Ludlum 26-1 Integrated GM Pancake Frisker	Agency staff home and/or vehicle and office	X	X	Х						Х
	Portable	Ludlum 25 Personal Radiation Monitor	Agency staff home and/or vehicle and office					X				
	Portable	Thermo Scientific RadEye B20-ER	Agency staff home and/or vehicle and office	X	X	X						X
	Portable	Ludlum 78 GM stretchscope	Charlestown, MA (Office @ Schrafft Ctr.)			X		X				
	Portable	Ludlum 2200 scaler rate meter with various probes	Jamaica Plain, MA (MERL)	X	X	Х						X
	Portable	Ludlum 2221 scaler rate meter with various probes	Jamaica Plain, MA (MERL)	X	X	Х						X
_	Portable	Ludlum 2224-1 scaler rate meter	Jamaica Plain, MA (MERL)	X	X							X
	Fixed	Ludlum 500-2 pulser	Jamaica Plain, MA (MERL)	L	L							
	Portable	Ludlum 239-1F floor monitors (582 cc active area)	Jamaica Plain, MA (MERL)	X	X							X
_	Portable	Ludlum 14C GM	Rowley, MA (Rowley Fire Department)		X	X		X				X
_	Portable	CDV 718A beta gamma kit	Rowley, MA (Rowley Fire Department)		X	Х		X				X
	Portable	DC Radeco H-809C A/S & spare head	Rowley, MA (Rowley Fire Department)							X		
-	Portable	Silver zeolite cartridges and particulate filters	Rowley, MA (Rowley Fire Department)	—	_					X		
	Portable	Ludlum 14C GM	Jamaica Plain, MA (MERL)		X	X		X				X
	Portable	CDV 718A beta gamma kit	Jamaica Plain, MA (MERL)		X	Х		X				X
		DC Radeco H-809C A/S & spare head	Jamaica Plain, MA (MERL)	—	_					X		
		Silver zeolite cartridges and particulate filters	Jamaica Plain, MA (MERL)							X		
4		Nuclear Research Corp. CDV-718 GM detector	Charlestown, MA (Office @ Schrafft Ctr.)		Х	Х		X				X
3		CDV 718A beta gamma kit	Charlestown, MA (Office @ Schrafft Ctr.)		X	X		X				X
4		DC Radeco H-809C A/S & spare head	Charlestown, MA (Office @ Schrafft Ctr.)							X		
	Portable	Silver zeolite cartridges and particulate filters	Charlestown, MA (Office @ Schrafft Ctr.)	-	_					X		
_	Portable	F & J Specialty Products, Battery Air Sampler	Charlestown, MA (Office @ Schrafft Ctr.)	-	-					X		+
_		XRF Corp ICS 4000	Agency staff home and/or vehicle and office	-	_	X		X	X	-	X	+
	Portable	XRF Corp ICS 4000	Agency staff home and/or vehicle and office	-	_	X		X	X		X	+
	Portable	XRF Corp ICS 4000	Agency staff home and/or vehicle and office	-	_	Х		X	χ		X	
	Portable	Ludlum Model 700 Isotope Identifier	Charlestown, MA (Office @ Schrafft Ctr.)	-	_	Х		X				+
	Portable	Thermo Scientific RIIDEye X-G Rad Nuclide Identifier	Agency staff home and/or vehicle and office	_	_	Х		X	X			
_	Portable	FLIR R 400 Nuclide Identifier	Agency staff home and/or vehicle and office	\vdash		X		X	X			
	**	Operable but not calibrated										

			RADIATION CONT		(OGR/	AM .						
			TABLE B-2 (contin									
		OPERABLE IONIZING RADIATION	DETECTION and/orMEASUR	EMENT	EOUI	PMBNT 8	LOCATI	ON - updat	ed as of 12-10	2020		
				<u> </u>								
					₹adiat	ion Detec				Primary F		
QTY	TYPE	DESCRIPTION	LOCATION	Alpha	Beta	Gamma/ X-ray		Exposure	Isotope Identification	Air Sampling	Gamma Spectrocospy	Contamination Detection
1	Fixed	Panasonic TLD Reader UD-716AGL, w/801, 814 badges	Jamaica Plain, MA (MERL)	ĺ	ĺ	X	ĺ	X		į		i
- 1	Fixed	Can berra HPGe 35% Eff., w/ Genie 2K software	Jamaica Plain, MA (MERL)			X			X			
- 1	Fixed	Can b. Tennelec Series 5 XLB Alpha/Beta Counter	Jamaica Plain, MA (MERL)	X	X							
- 1	Portable	ThermoEberline HandECount Alpha/Beta Counter	Jamaica Plain, MA (MERL)	X	X							
2	Portable	Ludlum 14C with 44-9 Probe	Jamaica Plain, MA (MERL)									
2	Portable	Thermo Scientific RadEye B20-ER	Jamaica Plain, MA (MERL)	X	X	X						X
- 1	Probe	Ludlum 42-30, PR148179, MERL FM#31 (base only)	Jamaica Plain, MA (MERL)				Х					
1	Probe	Ludlum 43-68, PR095923	Jamaica Plain, MA (MERL)	Х	Х							
1	Probe	Ludlum 43-68, PR160698	Jamaica Plain, MA (MERL)	X	Х							
-1	Probe	Ludlum 43-77, PR095922	Jamaica Plain, MA (MERL)			X						
- 1	Probe	Ludlum 43-77, PR095924	Jamaica Plain, MA (MERL)			X						
- 1	Probe	Ludlum 43-89, PR139996, No.1 AB SCINT PHOSWITCH	Jamaica Plain, MA (MERL)	X	X							
1	Probe	Ludlum 43-89, PR139581, No.2 AB SCINT PHOSWITCH	Jamaica Plain, MA (MERL)	X	X							
- 1	Probe	Ludlum 43-90, PR129812, No.1 AB SCINT MERL	Jamaica Plain, MA (MERL)	X	X							
1	Probe	Ludlum 43-90, PR129811, No.2 AB SCINT	Jamaica Plain, MA (MERL)	X	Х							
- 1	Probe	Ludlum 44-10, PR162410, MERL	Jamaica Plain, MA (MERL)			X						
- 1	Probe	Ludlum 44-10, PR066588, MERL	Jamaica Plain, MA (MERL)			X						
1	Probe	Ludlum 44-10, PR162403, MERL	Jamaica Plain, MA (MERL)			X						
1	Probe	Ludlum 44-17, PR159200	Jamaica Plain, MA (MERL)			X						
1	Probe	Ludlum 44-110, PR160171Tritium	Jamaica Plain, MA (MERL)									
- 1	Probe	Ludlum 44-110, PR160172 Tritium	Jamaica Plain, MA (MERL)									
-1	Probe	Ludlum 44-98, PR124143, BGO I125, C14	Jamaica Plain, MA (MERL)		Х	X						
- 1	Probe	Ludlum 180-14, PR071318	Jamaica Plain, MA (MERL)									
-1	Portable	Ludlum Model 1000 Scaler	Jamaica Plain, MA (MERL)									
1	Portable	Eberline E-120 GM, Serial 2111+ HP210+ SH4 Holder	Jamaica Plain, MA (MERL)									
1	Probe	Eberline HP210+ SH 4 Sample Holder	Jamaica Plain, MA (MERL)									
2	Fixed	Ludlum 1000 Scaler	Jamaica Plain, MA (MERL)									
1	Fixed	Ludlum 2350-1Data Logger	Jamaica Plain, MA (MERL)						, i			
	END											
		Operable but not calibrated										
		Undergoing planned phase out										

Survey Instruments used by inspectors are calibrated by persons specifically licensed by Agreement States to perform calibrations to include by Atlantic Nuclear of Massachusetts and Ludlum Measurements of Texas. Laboratory type instrumentation used at the Massachusetts Environmental Radiation Laboratory is calibrated in accordance with the model procedures contained in Appendix I of U.S. NRC NUREG-1556, Volume 7, Revision 1, published February 2018.

All instruments in use by inspectors are properly calibrated at this time. There were sufficient calibrated instruments available throughout the review period.

IV. <u>Technical Quality of Licensing Actions</u>

18. How many specific radioactive material licenses does your program regulate at this time?

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19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

Protec license renewal (RENEW Docket No. 18-3776)
Alpha Tau two new licenses (NEWLI Docket Nos. 21-2901 and 13-3569)

These licensing actions related to other actions (SINSP Docket No. 0705-04 – special inspection in response to Protec bankruptcy; SSDEV Docket No. 21-2903 – sealed source and device evaluation of Alpha Tau product).

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

Financial Surety Cases: Exemption from decommissioning funding plan requirements of 105 CMR 120.125(C) were granted, to be compatible with the recommendations of NRC's STC-17-057.

Effective April 6, 2020, through June 31, 2021, exemptions from timeliness requirements for performing leak testing of sealed sources, certain radiation surveys, calibration of instruments, and worker refresher training were provided to all licensees and posted to the Agency's website. The exemptions provided for deferment of up to three (3) months from timeliness requirements due to the COVID-19 Public Health Emergency.

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

Licenses written using Word instead of previously using WordPerfect.

Licensing related forms were updated to incorporates Developer content controls such as pull-down menus and check boxes.

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

There are no renewal applications that have been pending for more than one year.

- V. Technical Quality of Incident and Allegation Activities
 - 23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

None

Licensee Name License # Date of Incident/Report Type of Incident

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

Event Procedure revised 3/16/2021: Two SOPs (RCP-2014-3 and RCP-2014-4, event closure expectations and event response decision making) consolidated into the procedure. The procedure also updated to address SA-300 inconsistency including for reporting 30-day telephone report events to NRC Operations Center instead of only to NMED.

SOP #: RCP-2020-02, Responding to Request for Overnight Hold on Trash-Hauling Vehicle, effective 9/20/2020.

SOP #: RCP-2019-02, SOP for Trash, Waste and Scrap Metal Facility Radiation Alarms, effective 5/28/2019.

SOP #: RCP-2019-01, Standard Operating Procedures — Enforcement Policy and Procedures - Civil Penalties, Radioactive Materials, effective 1/17/2019.

C. NON-COMMON PERFORMANCE INDICATORS

Legislation, Regulations and Other Program Elements (formerly Compatibility Requirements)

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

Massachusetts Department of Public Health Radiation Control Statutes: M.G.L. c. 111 §§2, 3, 4F, 5K, 5L, 5M, 5O, 5P, 5Q. Administrative Procedures Act: M.G.L. c. 30A. Conflict of Interest Law: M.G.L. c. 268A. Low-Level Radioactive Waste Law: M.G.L. c. 111H. Labor and Industry Statutes: M.G.L. c. 149.

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

No.

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

The SRS sheet enclosed with the questionnaire made part of NRC scheduling letter is correct. Five RATS-IDs (2018-1; 2018-2; 2018-3; 2019-1; and 2019-2) were Proposed Regulations in 2020 and there is one RATS-ID (2015-3) with one comment in 2018 of Final Regulations. The Commonwealth published on October 14, 2022, final regulations to address all six of these RATS-IDs. We plan to submit these Final Regulations to NRC for review shortly.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

The Program's process for maintaining compatibility between NRC and RCP regulations is as follows. The process can be accomplished in approximately one year as was previously demonstrated for RATS-IDs 2013-1 "Physical Protection of Byproduct Material" that was completed as final regulations in 2016. These most recently amended regulations (relating to the six RATS-IDs) took considerably longer to complete due, in part, to the COVID-19 Public Health Emergency.

- 1. NRC notifies RCP of changes to regulations. Massachusetts regulations must be reviewed and if necessary changed or justified to maintain compatibility with NRC regulations.
- 2. The status of Massachusetts regulations related to radiation control may be viewed at: http://nrc-stp.ornl.gov/special/regs/ma srschart.pdf
- 3. Upon notification by NRC, RCP will review NRC new or changes to existing CFR's and develop proposed changes to Massachusetts codes, or communicate to NRC where existing regulations address the same issues as the federal code.
- 4. All changes, or proposed justifications for compatibility, will be reviewed first by assigned RCP staff and the RCP Director.
- 5. Draft materials will then be issued to the NRC for initial review and comment.
- 6. Reviewed draft material including changes based on comments from NRC will then be sent to

- MDPH Legal Office for review, comment and approval, then revised accordingly.
- 7. RCP, in coordination with the Legal Office, will draft a memo to the Public Health Council (PHC) on the proposed amendments. The draft PHC memo will be sent to the Director of the Bureau of Environmental Health for review and approval.
- 8. The Legal Office will initiate approval process and docketing for PHC review. Following initial presentation to the PHC, the Legal Office will assist in filing hearing notice with the Secretary of State and scheduling one or more public hearings as well as public comment period dates.
- 9. Upon receipt of the galleys from the Secretary of State's Office, the Legal Office will provide a copy for RCP review. The RCP Director and two or more staff will review the galleys to ensure accuracy of proposed amendments.
- 10. Following the public comment period, RCP will make any additional edits to the proposed amendments, as deemed appropriate, and prepare the final PHC memo, in consultation with the Legal Office. Draft final PHC memo will be shared with BEH Director for review and approval. The Legal Office will coordinate final approvals and docketing for PHC meeting. Proposed amendments are subject to a vote of approval by the PHC.
- 11. Upon approval by the PHC, the Legal Office will prepare submission of final regulation for publication in the Massachusetts Register. The Legal Office will request from the Secretary of State's Office an opportunity to review the final version prior to publication. The final version will be reviewed by the RCP Director and two or more staff. Upon completion of review, the final version will be sent to the Secretary of State's Office for final promulgation.

II. Sealed Source and Device (SS&D) Evaluation Program

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

SS&D Manufacturer,
Registry Distributor or Product Type Date Type of
Number Custom User or Use Issued Action

						Action
			1st	2nd		Issued
Facility Name	SSD Number:	Docket No	Reviewer	Reviewer	Action	Date
THERMO EGS GAUGING, LLC	MA-1287-D-108-B	21-3383	BL	SM	SSDEV	1/27/2020
ALPHA TAU MEDICAL, INC.	MA-1426-D-101-S	21-2903	BL	SM	SSDEV	8/14/2018
QSA GLOBAL, INC.	MA-1059-S-104-S	20-3833	SM		SSDCR	8/16/2019
THERMO PROCESS INSTRUMENTS,	MA-1396-D-104-B	16-3724	SM		SSDCR	5/6/2019
L.P. D/B/A THERMO FISHER SC						
QSA GLOBAL, INC.	MA-1059-S-250-S	20-3352	SM		SSDCR	8/21/2018
PERKINELMER, INC.	MA-1371-D-801-G	15-4477	SM	BL	SSDIN	7/21/2021
THERMO PROCESS INSTRUMENTS,	MA-1396-D-803-B	15-4458	SM	BL	SSDIN	7/14/2021
L.P. D/B/A THERMO FISHER SC						
THERMO PROCESS INSTRUMENTS,	MA-1396-D-802-B	15-4457	SM	BL	SSDIN	7/14/2021
L.P. D/B/A THERMO FISHER SC						
THERMO PROCESS INSTRUMENTS,	MA-1396-D-801-B	15-4456	SM	BL	SSDIN	7/14/2021
L.P. D/B/A THERMO FISHER SC						
ECKERT & ZIEGLER RADIOPHARMA	MA-1390-S-801-S	19-4200	BL	SM	SSDIN	3/19/2021
GMBH						
BRUKER DETECTION CORPORATION	MA-1101-D-103-B	23-2970	BL	SM	SSDIN	9/10/2018
ALPHA TAU MEDICAL, INC.	MA-1426-D-101-S	15-4897	BL	SM	SSDAM	8/9/2022

						Action
Facility Name	SSD Number:	Docket No	1st Reviewer	2nd Reviewer	Action	Issued Date
QSA GLOBAL, INC.	MA-1059-S-232-S	22-4681	BL	SM	SSDAM	1/5/2022
QSA GLOBAL, INC.	MA-1059-D-361-S	22-4679	SM	BL	SSDAM	12/27/2021
VIKEN DETECTION CORPORATION	MA-1397-D-101-B	19-4602	BL	SM	SSDAM	10/13/2021
THERMO EGS GAUGING, LLC	MA-1287-D-108-B	16-4529	BL	SM	SSDAM	10/5/2021
MALVERN PANALYTICAL, INC.	MA-1348-D-102-S	18-4570	BL	SM	SSDAM	8/12/2021
ALPHA TAU MEDICAL, INC.	MA-1426-D-101-S	13-4388	BL	SM	SSDAM	6/29/2021
QSA GLOBAL, INC.	MA-1059-S-126-S	24-4354	BL	SM	SSDAM	5/18/2021
QSA GLOBAL, INC.	MA-1059-D-361-S	24-4368	SM	BL	SSDAM	2/23/2021
THERMO EGS GAUGING, LLC	MA-1287-D-107-B	21-4276	BL	SM	SSDAM	10/21/2020
QSA GLOBAL, INC.	MA-1059-D-365-S	19-4201	SM	BL	SSDAM	9/23/2020
THERMO EGS GAUGING, LLC	MA-1287-D-102-B	19-4201	SM	BL	SSDAM	8/14/2020
THERMO EGS GAUGING, LLC	MA-1287-D-102-B	19-4207	SM	BL	SSDAM	8/14/2020
THERMO EGS GAUGING, LLC	MA-1287-D-106-B	19-4207	SM	BL	SSDAM	8/14/2020
· ·	MA-1287-D-100-B	19-4208	SM	BL	SSDAM	8/14/2020
THERMO EGS GAUGING, LLC THERMO EGS GAUGING, LLC	MA-1287-D-107-B	19-4205	SM	BL	SSDAM	8/14/2020
· ·		16-4139	SM			
QSA GLOBAL, INC.	MA-1059-S-379-S			BL	SSDAM	6/17/2020
THERMO NITON ANALYZERS, LLC	MA-1159-D-101-B	15-4114	SM	BL	SSDAM	4/15/2020
QSA GLOBAL, INC.	MA-1059-S-121-S	13-4047	BL	SM	SSDAM	4/16/2020
SIRTEX WILMINGTON LLC	MA-1229-D-101-S	23-3955	BL	SM	SSDAM	3/13/2020
ALPHA TAU MEDICAL, INC.	MA-1426-D-101-S	24-3998	BL	SM	SSDAM	1/2/2020
QSA GLOBAL, INC.	MA-1059-D-105-B	23-3954	SM	BL	SSDAM	12/17/2019
THERMO PROCESS INSTRUMENTS,	MA-1396-D-103-B	21-3892	SM	BL	SSDAM	12/17/2019
L.P. D/B/A THERMO FISHER SC THERMO PROCESS INSTRUMENTS,	MA-1396-D-104-B	21-3893	SM	BL	SSDAM	12/17/2019
L.P. D/B/A THERMO FISHER SC	MIA-1390-D-104-B	21-3693	SIVI	DL	SSDAM	12/1//2019
THERMO PROCESS INSTRUMENTS,	MA-1396-D-101-B	21-3890	SM	BL	SSDAM	12/17/2019
L.P. D/B/A THERMO FISHER SC	Will 1890 B Tot B	21 3070	5111	DL	SSETIM	12/1//2019
THERMO PROCESS INSTRUMENTS,	MA-1396-D-102-B	21-3891	SM	BL	SSDAM	12/17/2019
L.P. D/B/A THERMO FISHER SC						
VIKEN DETECTION CORPORATION	MA-1397-D-101-B	21-3902	SM	BL	SSDAM	11/1/2019
QSA GLOBAL, INC.	MA-1059-S-104-S	19-3811	SM	BL	SSDAM	7/22/2019
QSA GLOBAL, INC.	MA-1059-S-271-S	17-3732	SM	BL	SSDAM	5/10/2019
VIKEN DETECTION CORPORATION	MA-1397-D-101-B	15-3631	SM	BL	SSDAM	5/13/2019
QSA GLOBAL, INC.	MA-1059-S-271-S	23-3449	SM	BL	SSDAM	3/7/2019
THERMO PROCESS INSTRUMENTS,	MA-1396-D-103-B	20-3353	SM	BL	SSDAM	11/20/2018
L.P. D/B/A THERMO FISHER SC						
THERMO PROCESS INSTRUMENTS,	MA-1396-D-104-B	21-3396	SM	BL	SSDAM	11/20/2018
L.P. D/B/A THERMO FISHER SC						
THERMO EGS GAUGING, LLC	MA-1287-D-107-B	20-3356	SM	BL	SSDAM	10/23/2018
HEURESIS CORPORATION	MA-1397-D-101-B	18-3253	SM	BL	SSDAM	9/17/2018
QSA GLOBAL, INC.	MA-1059-S-204-S	19-3341	SM	BL	SSDAM	9/11/2018
THERMO EGS GAUGING, LLC	MA-1287-D-104-B	19-3332	BL	SM	SSDAM	7/25/2018
THERMO EGS GAUGING, LLC	MA-1287-D-105-B	19-3333	BL	SM	SSDAM	7/25/2018

			1st	2nd		Action Issued
Facility Name	SSD Number:	Docket No	Reviewer	Reviewer	Action	Date
THERMO EGS GAUGING, LLC	MA-1287-D-106-B	19-3334	BL	SM	SSDAM	7/25/2018
THERMO EGS GAUGING, LLC	MA-1287-D-101-B	19-3330	SM	BL	SSDAM	7/25/2018
THERMO EGS GAUGING, LLC	MA-1287-D-102-B	19-3331	SM	BL	SSDAM	7/25/2018
QSA GLOBAL, INC.	MA-1059-S-250-S	18-3261	SM	BL	SSDAM	7/23/2018

SS&D product type and use codes are identified on each registration. The registration numbers on the listed SS&D registrations are those acted upon when assigned and in some cases, such as for inactivations, changed to a different number. The information is available in our files and in the national Sealed Source and Device Registry.

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

The SS&D program is part of the materials program and is integrated into all the sections of this questionnaire.

III. <u>Low-level Radioactive Waste Disposal Program</u>

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

IV. Uranium Recovery Program

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

MATERIALS REQUESTED TO BE AVAILABLE FOR THE ON-SITE PORTION OF AN IMPEP REVIEW

Please have the following information available for use by the IMPEP review team when they arrive at your office:

- List of open license cases, with date of original request, and dates of follow-up actions.
- List of licenses terminated during review period.
- Copy of current log or other document used to track licensing actions.
- List of all licensing actions completed during the review period (sorted by license reviewer, if possible).
- Copy of current log or other document used to track inspections.
- List of all inspections completed during the review period (sorted by inspector, if possible).
- List of inspection frequencies by license type.
- List of all allegations occurring during the review period. Show whether the allegation is open or closed and whether it was referred by NRC.
- List of all licenses that your agency has imposed additional security requirements upon.

ALSO, PLEASE HAVE THE FOLLOWING DOCUMENTS AVAILABLE:

- All State regulations
- Statutes affecting the regulatory authority of the State program
- Standard license conditions
- Technical procedures for licensing, model licenses, review guides
- SS&D review procedures, guides, and standards
- Instrument calibration records
- Inspection procedures and guides
- Inspection report forms

- Documented training plan, if applicable
- Records of results of supervisory accompaniments of inspectors
- Emergency plan and communications list
- Procedures for investigating allegations
- Procedures for investigating incidents
- Enforcement procedures, including procedures for escalated enforcement, severity levels, civil penalties (as applicable)
- Job descriptions